The following is a sample SPCC Plan for a bulk oil storage facility (Note: other requirements apply to oil production, drilling, and workover facilities). This fictional sample is intended to serve as an example for facilities that are required to prepare an SPCC Plan. Individual facilities are different so each SPCC Plan will be different, and the level of detail in each Plan will be based on the design and size of the facility. A site diagram or diagrams which illustrate the design and organization of a facility (e.g., drainage patterns, locations of spill equipment, etc.) should be included. In this example, the requirements for the SPCC Plan found in 40 CFR 112.7 are enclosed in a box. Sample language for the example facility described as the Neverspill Oil Corporation follows the regulatory citations.

SAMPLE

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

FOR

Neverspill Oil Corporation

Clean City Bulk Storage Terminal
2000 Prevention Street
Clean City, California 90000

Original Date of Plan: January 1, 1974
Date of Last Plan Amendment/P.E. Certification: June 30, 1995
Date of Last Plan Review: January 1, 1998

Designated person accountable for spill prevention:
Kelly Neverspill
Facility Manager

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.

Engineer: Robert Cleanwater, R.P.E.

Signature: Robert Cleanwater, R.P. E.

Registration Number: 88888

State: California

Date: 6/30/95

NOTICE

The statements in this document are intended solely as guidance. This document is not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party in litigation with the United States.

SEAL

SPILL PREVENTION CONTROL AND COUNTERMEASURE COMPLIANCE INSPECTION PLAN REVIEW PAGE

In accordance with 40 CFR 112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every three years. As a result of this review and evaluation, Neverspill Oil Corporation will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of review. Any amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

Review Dates	Signature
1. January 1, 1977	Kelly Neverspill
2. January 1, 1980	Kelly Neverspill
3. January 1, 1983	Kelly Neverspill
4. January 1, 1986	Kelly Neverspill
5. January 1, 1989	Kelly Neverspill
6. January 1, 1992	Kelly Neverspill
7. January 1, 1995*	Kelly Neverspill
8. January 1, 1998	Kelly Neverspill
9. January 1, 2001	

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* SPCC Plan amended and certified by a Registered Professional Engineer per 40 CFR 112.3(d).

MANAGEMENT APPROVAL

Neverspill Oil Corporation is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains the highest standards for spill prevention control and countermeasures through regular review, updating, and implementation of this Spill Prevention Control and Countermeasure Plan for the Clean City Bulk Storage Terminal.

Authorized Facility Representative: Kelly Neverspill Signature: Kelly Neverspill

Title: Facility Manager

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FIGURES

APPENDICES

1. FACILITY OWNER and OPERATOR:

A. Facility Owner, Address, and Telephone:

Neverspill Oil Corporation
3000 Hitech Avenue
Goodfaith, Arizona 91111
(345) 678-7654

B. Facility Operator, Address and Telephone:

Neverspill Oil Corporation
Clean City Bulk Storage Terminal
2000 Prevention Street
Clean City, California 90000
(555) 123-4560

2. FACILITY CONTACT(s):

Name	Title	Telephone
Kelly Neverspill	Facility Manager	(555) 123-4566
John Leaknone	Plant Operator	(555) 123-4567

3. FACILITY DESCRIPTION:

Note: The background information in this section is not required by 40 CFR part 112. However, it is recommended that facility background information be provided.

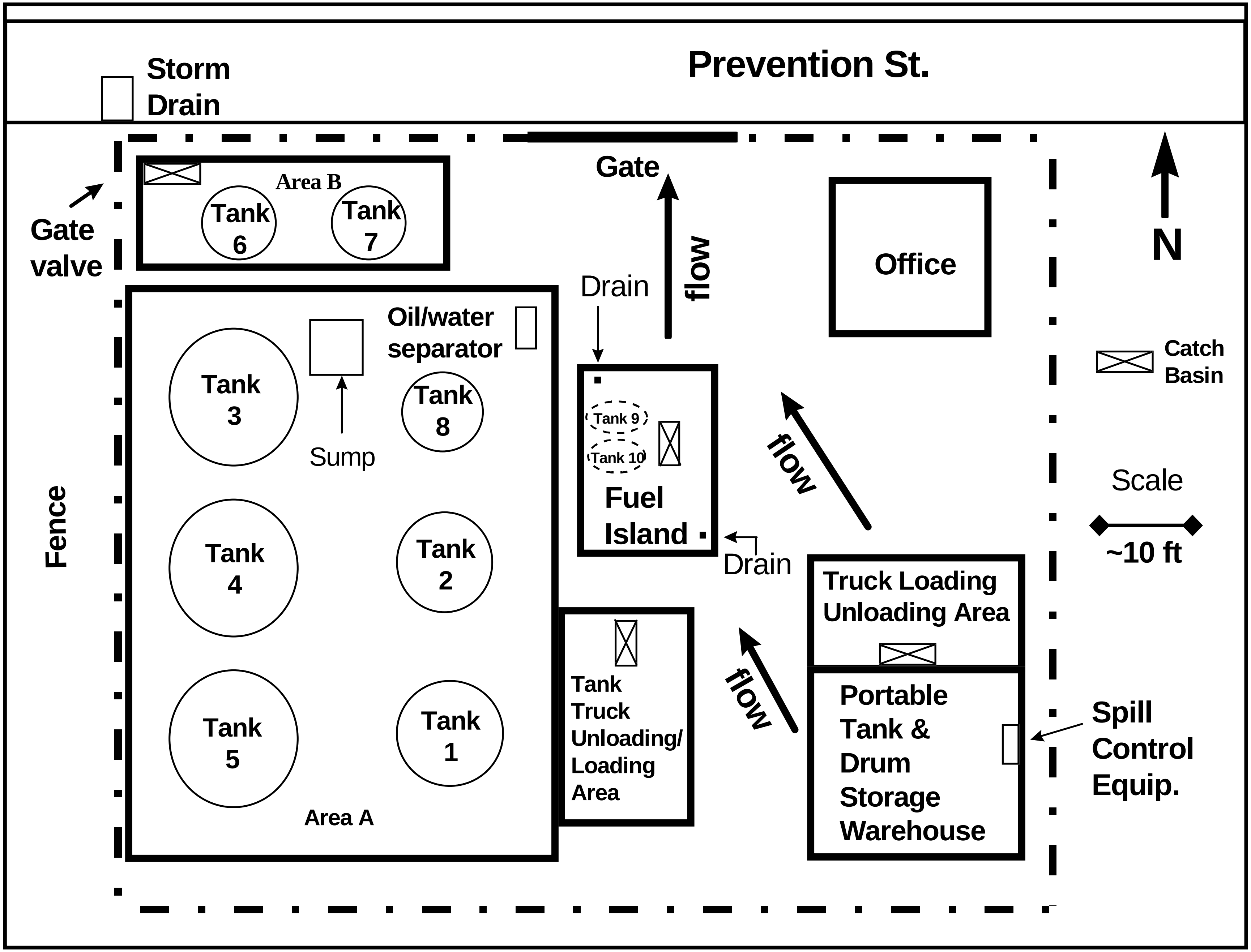
A. Facility Operations:

In this section describe your facility's day-to-day operations, including hours of operation, personnel, and operational history. In your description include a discussion of the modes of transportation used for receiving products and raw materials (e.g., pipeline, railcar, tanker truck).

Neverspill Oil Corporation, Clean City Bulk Storage Terminal, is a bulk storage terminal and cardlock facility for the distribution of oil, gasoline, and diesel to various commercial businesses. The facility receives products by common carrier via tank truck. Products are stored in eight aboveground storage tanks (ASTs) and two double-walled underground storage tanks (USTs). Products are distributed to customers by Neverspill Corporation or contractor tank trucks. Hours of operation at the Clean City Bulk Storage Terminal are from 5 a.m. to 7 p.m., 6 days per week. Personnel at the Clean City Bulk Terminal include a facility manager, a plant operator, two bobtail truck drivers, a secretary/bookkeeper, and three operation and maintenance personnel. The facility is always manned during hours of operation.

This facility began operations in August 1952. At that time, oil storage consisted of motor oils in two aboveground tanks (Area A) and numerous drums. In 1960, the facility expanded to include the storage of gasoline and diesel (Area B) and the cardlock fuel island. In 1974, a slop tank and an oil/water separator were installed at the plant to collect and treat water collected in Area B and facility catch basins. In 1994, piping in Area B was modified and the USTs at the fuel island were removed and replaced with upgraded tanks. This SPCC Plan was amended within six months of the alterations and certified by a Registered Professional Engineer per 40 CFR 112.3(d).

FIGURE 1 FACILITY LAYOUT AND SURFACE DRAINAGE DIAGRAM


Storm
Drain
Prevention St.
Gate
valve
Area B
Tank 6
Tank 7
Gate
flow
Office
N
Drain
Oil/water
separator
Tank 3
Sump
Tank 8
Tank 9
Tank 10
Fuel
Island
flow
Catch
Basin
Scale
~10 ft
Fence
Tank 4
Tank 2
Drain
Truck Loading
Unloading Area
Tank
Truck
Unloading/
Loading
Area
flow
Portable
Tank &
Drum
Storage
Warehouse
Spill
Control
Equip.
Tank 5
Tank 1
Area A

B. Facility Storage:

In this section describe all types of oil product storage at your facility including oil products stored in aboveground storage tanks (ASTs), underground storage tanks (USTs), oil-filled electrical equipment (e.g., circuit breakers, transformers), spill tanks, oil/water separators, vapor recovery units portable tanks, drum storage, and trucks which hold oil product and are parked on site.

Tank ID	Volume	Contents
Aboveground Storage Tanks		
#1 Motor Oil	4,000 gallons	Motor Oil
#2 Motor Oil	4,000 gallons	Motor Oil
#3 Gasoline	25,000 gallons	Unleaded Gasoline
#4 Gasoline	25,000 gallons	Premium Gasoline
#5 Gasoline	25,000 gallons	Unleaded Gasoline
#6 Diesel	20,000 gallons	Diesel
#7 No. 4 Fuel	20,000 gallons	No. 4 Fuel
#8 Slop Tank	6,000 gallons	Oil and water
Underground Storage Tanks		
#9 Gasoline	8,000 gallons	Unleaded Gasoline
#10 Gasoline	8,000 gallons	Premium Gasoline
Oil/Water Separator	3,000 gallons (1,000-gal. compartments)	Oil and Water

Drums/Containers	Volume	Contents
Portable tank	500 gallons	Motor Oil
225 Drums	55 gallons each	Motor Oil
25 Drums	55 gallons each	Brake Fluid

Total: 146,610 gallons [This total includes the total volume of the oil/water separator.]

C. Drainage Pathway and Distance to Navigable Waters

This section should describe the facility's proximity to bays, rivers, streams (perennial or intermittent), creeks, ditches, flood control channels, storm drains, and other waterways. Hydrological systems should be diagramed or described.

The Neverspill Oil Corporation, Clean City Bulk Storage Terminal is located two miles southeast of Happy Creek. A storm drain, which empties to Happy Creek, is located on Prevention Street, at the northwest corner of the facility, 30 feet from the boundary.

4. SPILL HISTORY [112.7(a)]:

112.7(a) A facility which has experienced one or more spill events within twelve months prior to the effective date of this part should include a written description of each such spill, corrective action taken and plans for preventing recurrence.

Note: Include type and amount of oil spilled, location, date and time of spill(s), watercourses affected (if any), physical damages, cost of damages, cost of cleanup, cause of spill or discharge, and corrective action taken.

SPILL HISTORY						
Location/Date /Time of Spill	**Type & Amount Spilled**	**Cause**	**Affected Watercourses**	**Damages and Cost of Damages**	**Cleanup Cost**	**Corrective Action**
Tank #6 January 17, 1973 11:45 a.m.	122 gallons diesel.	Blocked inlet valve to Tank #6 caused slow flow and eventual bursting of valve during tank filling.	Prevention Street storm drain.	Ruptured inlet valve to Tank #6. $275.00 for valve replacement.	$140.00 for absorbent pads; $160 disposal by contractor.	Modify transfer operations procedure and training. Include valve flow in weekly inspections.
Drum Warehouse June 14, 1991 4:00 p.m.	55 gallons brake fluid.	Drum fell off forklift and ruptured.	Sheen into Prevention Street storm drain.	Loss of one drum of product.	No damages.	Add trenches in warehouse. Prohibit stacking of drums three high on forklifts; train staff.

5. POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL [112.7(b)]:

112.7(b) Where experience indicates a reasonable potential for equipment failure (such as tank overflow, rupture, or leakage), the plan should include a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each major type of failure.

Note: Types of failures to consider include tank (aboveground and underground) overflow, rupture or leakage, pipe failure, wastewater treatment facility failure and spills during transfer operations at the rack and/or dock or tank truck parking areas. The direction a spill would flow can be predicted by drainage patterns, the location of storm or sewer drains, and secondary containment; these predictions should be performed or verified by a Professional Engineer. The rate of flow will depend upon the size and location of the failure and the equipment involved. The total quantity of oil which could be discharged from the facility should be based on a worst case situation and the time it would take to respond to a spill (e.g., shutting off a pump or closing a valve).

Source	Type of Failure	Volume	Rate (gallon/hr)	Direction of flow	Containment
Aboveground Storage Tanks					
#1 Motor Oil	rupture; leakage	4,000 gal	4,000 gal/hr	north	4,706 gal
#2 Motor Oil	rupture; leakage	4,000 gal	4,000 gal/hr	east	4,706 gal
#3 Gasoline	rupture; leakage	25,000 gal	25,000gal/hr	east	38,736 gal
#4 Gasoline	rupture; leakage	25,000 gal	25,000gal/hr	northeast	38,736 gal
#5 Gasoline	rupture; leakage	25,000 gal	25,000gal/hr	northeast	38,736 gal
#6 Diesel	rupture; leakage	20,000 gal	20,000gal/hr	northeast	38,736 gal
#7 No. 4 Fuel	rupture; leakage	20,000 gal	20,000gal/hr	northeast	38,736 gal
#8 Slop Tank	rupture; leakage	6,000 gal	6,000 gal/hr	east	38,736 gal
#9 Gasoline	leakage; overfill	8,000 gal	rate will vary	east	8,000 gal
#10 Gasoline	leakage; overfill	8,000 gal	rate will vary	east	8,000 gal
Truck Loading/Unloading Operations					
Tank Truck Loading/ Unloading Rack	rupture; piping failure; valve failure	3,000 gal	3,000 gal/hr	north	3,000 gal
Truck Unloading Dock	drum rupture	55 gal	55 gal/hr	northwest	1,000 gal
Fuel Island	rupture; overfill; valve failure	3,000 gal	3,000 gal/hr	northeast	3,000 gal
Other Equipment/Storage					
Aboveground Pipelines	leakage; valve failure	150 gal	150 gal/hr	within containment	3,000 to 38,736 gal (depending

Source	Type of Failure	Volume	Rate (gallon/hr)	Direction of flow	Containment
				area or towards grated sump	on location of failure)
Drum and Portable Tank Storage Area	drum rupture	55 gal	55 gal/hr	within warehouse	500 gal
Underground Oil/Water Separator	rupture	3,000 gal	3,000 gal/hr	into soil and groundwater	3,500 gal

6. PREVENTION MEASURES PROVIDED:

Drainage Control Diversionary Structures and Containment [112.7(c)]

112.7(c) Appropriate containment and/or diversionary structures or equipment to prevent discharged oil from reaching a navigable water course should be provided. One of the following preventive systems or its equivalent should be used as a minimum:

(1) Onshore facilities:
(i) Dikes, berms or retaining walls sufficiently impervious to contain spilled oil;
(ii) Curbing;
(iii) Culverting, gutters or other drainage systems;
(iv) Weirs, booms or other barriers;
(v) Spill diversion ponds;
(vi) Retention ponds;
(vii) Sorbent materials.
(2) Offshore facilities:
(i) Curbing, drip pans;
(ii) Sumps and collection systems.

At Neverspill Oil Corporation, all areas that contain oil have secondary containment, including dikes, berms, walls, curbing, and catch basins.

A. Drainage Control [112.7(e)(1)(i-v)]:

(i) Drainage from diked storage areas:

112.7(e) (1) Facility drainage (onshore); (excluding production facilities). (i) Drainage from diked storage areas should be restrained by valves or other positive means to prevent a spill or other excessive leakage of oil into the drainage system or in plant effluent treatment system, except where plant systems are designed to handle such leakage. Diked areas may be emptied by pumps or ejectors; however, these should be manually activated and the condition of the accumulation should be examined before starting to be sure no oil will be discharged into the water.

Note: This section should describe drainage in areas of the facility which have localized secondary containment. Localized containment is specifically designed to retain drainage in operating areas of a facility (e.g., AST farm, truck loading/unloading rack, pipeline areas.)

Accumulation in Area A, which contains Tank Nos. 1 and 2, flows to a sump in the northwest corner of the containment area. The sump in Area A is drained through a manual gate valve after a careful examination for an oil sheen has been conducted and documented by the plant operator. If water is clean, it is released out of the valve into the storm drain located on Prevention Street, which drains to Happy Creek.

Accumulation in Area B, which includes Tank Nos. 3, 4, 5, 6, 7, 8 and the oil/water separator, drains to a sump located along the north wall, inside of the containment area. The contents of the sump are inspected for product which would suggest an equipment leak and then manually pumped to the slop tank, Tank No. 8. The contents of Tank No. 8 are manually pumped to the oil/water separator. Water from the oil/water separator is discharged to the Clean City Sanitation District (CCSD) after it is inspected for oil contamination. Oil that is collected in the oil/water separator is pumped out into a vacuum truck and is disposed of in accordance with federal, state, and local regulations. The fuel island is covered with a roof to restrict rainwater from the area. It is surrounded by a containment curb and has sloping topography into two drains which lead to a catchment basin. This catchment basin has underground piping, with a manual valve, to the slop tank in Area B.

The tank truck loading/unloading area is designed with continuous curbing along the edge. Inside the contained area there are two trenches which empty into a catchment basin for secondary containment. The contents of the catchment basin are manually pumped to the slop tank, via an underground pipeline.

The truck loading and unloading dock area at the warehouse is covered with a roof and is designed with a containment curb. Accumulation in this area will collect in the catchment basin at the base of the dock. If necessary, accumulation can be removed by a portable pump and then transferred to the slop tank.

(ii) Valves used on diked area storage:

112.7(e) (1) Facility drainage (onshore); (excluding production facilities). (ii) Flapper-type drain valves should not be used to drain diked areas. Valves used for the drainage of diked areas should, as far as practical, be of manual, open-and-closed design. When plant drainage drains directly into water courses and not into wastewater treatment plants, retained storm water should be inspected as provided in paragraphs (e)(2)(iii) (B), (C) and (D) of this section before drainage.

Area A is equipped with a normally closed and locked manual gate valve. Area B and the loading/unloading areas are equipped with manual valves for drainage into the slop tank. The slop tank has a manual valve to the oil/water separator. Water from the oil/water separator is released in batches, after inspection and documentation, and are continuously monitored.

(iii) Plant drainage systems from undiked areas:

112.7(e) (1) Facility drainage (onshore); (excluding production facilities). (iii) Plant drainage systems from undiked areas should, if possible, flow into ponds, lagoons or catchment basins, designed to retain oil or return it to the facility. Catchment basins should not be located in areas subject to periodic flooding.

Note: This section should describe drainage in areas of the facility that do **not** have localized containment (e.g., area drains to a retention pond). Facilities must ensure that such systems are designed in accordance with good engineering practices.

The only undiked areas of the facility are areas that contain aboveground piping. Facility topography in undiked areas is gently sloped towards a grated sump (catch basin) near the fuel island. This sump is inspected for sheen and documented by the plant operator before being manually pumped out onto Prevention Street. If any contamination is found, the contents are pumped into the slop tank.

(iv) Final discharge of drainage:

112.7(e) (1) Facility drainage (onshore); (excluding production facilities). (iv) If plant drainage is not engineered as above, the final discharge of all in plant ditches should be equipped with a diversion system that could, in the event of an uncontrolled spill, return the oil to the plant.

This section is not applicable to this facility because all areas of the facility have containment. Tank and transfer areas are engineered with localized secondary containment. Undiked areas flow to the grated sump. All discharges from sumps and catch basins are continuously monitored to ensure compliance with water quality standards. If oil were ever to enter the Prevention Street storm drain, the facility has access to manual gate valves in two locations along the city storm sewer system before the sewer empties into Happy Creek. Keys to the manual gate valves for the storm sewer are kept by the plant manager, the city fire department and the city water department.

(v) Facility Drainage Systems and Equipment:

112.7(e) (1) Facility drainage (onshore); (excluding production facilities). (v) Where drainage waters are treated in more than one treatment unit, natural hydraulic flow should be used. If pump transfer is needed, two ''lift'' pumps should be provided, and at least one of the pumps should be permanently installed when such treatment is continuous. In any event, whatever techniques are used facility drainage systems should be adequately engineered to prevent oil from reaching navigable waters in the event of equipment failure or human error at the facility.

Note: Facilities that use a wastewater treatment system (a system with two or more treatment units) for treating drainage must have a backup system in place should the system fail. In accordance with the Professional Engineer certification, the water collection and treatment system must be designed utilizing good engineering practices. The facility must describe the water collection and treatment system and its redundancies, including the use of oil/water separators.

Accumulation from Area B and the loading/unloading areas is collected in the slop tank. The slop tank is manually emptied to the oil/water separator using natural hydraulic flow. No more than 1,000 gallons, less than the capacity of the main compartment of the oil/water separator, is transferred from the slop tank. Water from the oil/water separator is batch discharged to the Clean City Sanitation District's (CCSD) sewer system and publicly owned treatment works (POTW) after a careful examination for contamination. All transfers into and out of the oil/water separator are closely monitored and logged by facility personnel. Neverspill Oil Corporation maintains reports of all discharges into the CCSD sewer system. The oil in the oil/water separator is monitored weekly and is pumped out, when the level reaches 70% of capacity, by a contracted vacuum truck. If the oil/water separator system were to malfunction, the system would be shut down and no discharges would be allowed. Accumulation would be stored in the slop tank and emptied via vacuum truck, if necessary.

B. <u>Bulk Storage Tanks/Secondary Containment [112.7(e)(2)(i-xi)]</u>:

(i) Tank compatibility with its contents:

112.7(e) (2) Bulk storage tanks (onshore); (excluding production facilities). (i) No tank should be used for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.

Note: Describe in detail the construction of all aboveground storage tanks and their compatibility with the liquids that they hold. Identify which standards (e.g., API standards) of construction have been followed and features of the individual tanks (e.g., double bottoms, coatings).

The ASTs are constructed of welded steel in accordance with API Standards 650 and 651 and are compatible with the contents that they hold. Tanks 1 and 2 were constructed in 1952, Tanks 3-7 were constructed in 1960 and Tank 8 was constructed in 1974. All tanks are grounded and seismically restrained for seismic zone 4. Tanks 3, 4 and 5 are retrofitted with double bottoms and all tanks have interior and exterior coatings.

(ii) Diked area construction and containment volume for storage tanks:

112.7(e) (2) Bulk storage tanks (onshore); (excluding production facilities). (ii) All bulk storage tank installations should be constructed so that a secondary means of containment is provided for the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation. Diked areas should be sufficiently impervious to contain spilled oil. Dikes, containment curbs, and pits are commonly employed for this purpose, but they may not always be appropriate. An alternative system could consist of a complete drainage trench enclosure arranged so that a spill could terminate and be safely confined in an in plant catchment basin or holding pond.

Note: Precipitation freeboard should be based on regional rainfall patterns.

The two bulk storage tank areas have concrete slabs, surrounded by rebar steel reinforced, concrete walls for containment. The concrete containment area has been designed to be sufficiently impervious to contain an oil spill of the largest tank, for at least 72 hours, without failure. Secondary containment for each tank area is designed to hold the entire contents of the largest tank plus sufficient freeboard to allow for precipitation. For the freeboard calculation, a 100-year, 24-hour storm event in the Clean City area was utilized. The containment for Area A will hold 4,706 gallons and Area B will hold 38,736 gallons in addition to 6 inlches of freeboard for rainfall. Appendix 1 provides secondary containment calculations for these areas.

112.7(e) (2) Bulk storage tanks (onshore); (excluding production facilities). (iii) Drainage of rainwater from the diked area into a storm drain or an effluent discharge that empties into an open water course, lake, or pond, and bypassing the in plant treatment system may be acceptable if:

(A) The bypass valve is normally sealed closed.
(B) Inspection of the run off rain water ensures compliance with applicable water quality standards and will not cause a harmful discharge as defined in 40 CFR part 110.
(C) The bypass valve is opened and resealed following drainage under responsible supervision.
(D) Adequate records are kept of such events.
Note: This section should include a detailed discussion of the inspection and drainage procedures used for diked areas and how drainage discharge is documented (e.g., checklist noting the appearance of the water, time of valve opening, time of valve closing, signature of inspector, etc.). This section should also include a discussion of an alternate method of drainage to be employed if an oil sheen or oil accumulation is observed.

(iii) Diked area, inspection and drainage of rainwater:

Rainwater that collects in Area A flows to a sump in the northwest corner of the containment area. There is also a grated sump in the undiked area of the facility, adjacent to the fuel island. Area A and the undiked area sump are drained through manually opened gate valves after a careful examination for oil has been conducted and documented by the plant operator. The plant operator notes the appearance of the water and the time when the valve is opened; monitors the drainage closely. After drainage is completed, the plant operator closes and locks the valve and notes the time of closure in the drainage discharge report. Appendix 2 includes a drainage discharge report form.

If an oil sheen is observed in Area A or in the undiked area sump, contaminated water will be pumped to the slop tank in Area B and not discharged through the drainage valve. Oil accumulation in the oil/water separator is removed by vacuum truck and discposed of in accordance with federal, state and local regulations.

Although Area B drainage does not flow into a storm drain or an effluent discharge system that empties into navigable waters, procedures for draining water from the oil water separator follow the same procedures discussed above in order to prevent discharges of oil from entering the CCSD POTW.

(iv) Corrosion protection of buried metallic storage tanks:

> *112.7(e) (2) Bulk storage tanks (onshore); (excluding production facilities). (iv) Buried metallic storage tanks represent a potential for undetected spills. A new buried installation should be protected from corrosion by coatings, cathodic protection or other effective methods compatible with local soil conditions. Such buried tanks should at least be subjected to regular pressure testing.*

> Note: Underground storage tanks for purposes of SPCC must be completely buried, unlike "underground storage tanks" in EPA's UST program, which may be partially buried.

The buried tanks at the Clean City Bulk Storage Terminal are double-walled, consisting of an inner steel tank surrounded by a fiberglass outer tank with interstitial monitoring. In-tank probes maintain tank inventory and identify leaks. The buried tanks have been designed and installed in compliance with the 40 CFR part 280, 1998 UST Standards. The oil/water separator is also buried. The primary separation unit is contained in a concrete basin which serves as secondary containment and corrosion protection. A liquid sensor is located in the concrete basin for detection of a release from the separator or groundwater infiltration.

(v) Corrosion protection of partially buried metallic tanks:

> *112.7(e) (2) Bulk storage tanks (onshore); (excluding production facilities). (v) Partially buried metallic tanks for the storage of oil should be avoided, unless the buried section of the shell is adequately coated, since partial burial in damp earth can cause rapid corrosion of metallic surfaces, especially at the earth/air interface.*

There are no partially buried tanks at Neverspill Oil Corporation.

(vi) Aboveground tank periodic integrity testing:

> *112.7(e) (2) Bulk storage tanks (onshore); (excluding production facilities). (vi) Aboveground tanks should be subject to periodic integrity testing, taking into account tank design (floating roof, etc.) and using such techniques as hydrostatic testing, visual inspection or a system of nondestructive shell thickness testing. Comparison records should be kept where appropriate, and tank supports and foundations should be included in these inspections. In addition, the outside of the tank should frequently be observed by operating personnel for signs of deterioration, leaks which might cause a spill, or accumulation of oil inside diked areas.*

Tanks are constantly observed by facility personnel during operating hours. Formal inspections are conducted weekly to examine the exterior of the tanks and the containment areas. These inspections are documented using the report form which can be found in Appendix 3. In accordance with API 653, every ten years, or more often when necessary based on visual inspection or monitoring results, the ASTs are drained, cleaned, inspected, repaired, if necessary, and painted.

(vii) Control of leakage through internal heating coils:

112.7(e) (2) Bulk storage tanks (onshore); (excluding production facilities). (vii) To control leakage through defective internal heating coils, the following factors should be considered and applied, as appropriate.

(A) The steam return or exhaust lines from internal heating coils which discharge into an open water course should be monitored for contamination, or passed through a settling tank, skimmer, or other separation or retention system.
(B) The feasibility of installing an external heating system should also be considered.

Tank #7 is equipped with internal heating coils. The pressure of the heating system is monitored and controlled. The heating coils operate as a closed loop system and condensate water is monitored closely for any contamination. The entire heating coil system is contained within the diked area.

(viii) Tank installation fail-safe engineered:

112.7(e) (2) Bulk storage tanks (onshore). (viii) New and old tank installations should, as far as practical, be fail-safe engineered or updated into a fail-safe engineered installation to avoid spills. Consideration should be given to providing one or more of the following devices:

(A) High liquid level alarms with an audible or visual signal at a constantly manned operation or surveillance station; in smaller plants an audible air vent may suffice.
(B) Considering size and complexity of the facility, high liquid level pump cutoff devices set to stop flow at a predetermined tank content level.
(C) Direct audible or code signal communication between the tank gauger and the pumping station.
(D) A fast response system for determining the liquid level of each bulk storage tank such as digital computers, telepulse, or direct vision gauges or their equivalent.
(E) Liquid level sensing devices should be regularly tested to insure proper operation.
Note: In order to provide adequate fail-safe engineering, redundancy should be employed. Inventory control and "sticking" are not adequate methods unless a second form of overfill prevention is utilized.

All tanks at Neverspill Oil Corporation are equipped with visual gauges which operate on a float system. Filling procedures allow tanks to be filled to a safe height which is designated to be 90% of the tank capacity. All tanks and the oil/water separator are equipped with high-level alarms. These alarms, which include high-level alarms at 90% and high-high level alarms at 95%, are inspected once every four weeks during the weekly facility inspection. At that time, the float gauges are calibrated by manually taping the tanks.

(ix) Observation of disposal facilities for effluent discharge:

Note: Facilities must indicate what type of backup system is used in the event of equipment malfunction.

112.7(e) (2) Bulk storage tanks (onshore); (excluding production facilities). (ix) Plant effluents which are discharged into navigable waters should have disposal facilities observed frequently enough to detect possible system upsets that could cause an oil spill event.

Water in the oil/water separator is inspected prior to batch discharge to the CCSD sewer system. Oil is removed by vacuum truck. If the system malfunctions, it will be shut down, and a contractor will be contacted to remove the contents of the separator and the slop tank, as needed.

(x) Visible oil leak corrections from tank seams and gaskets:

112.7(e) (2) Bulk storage tanks (onshore); (excluding production facilities). (x) Visible oil leaks which result in a loss of oil from tank seams, gaskets, rivets and bolts sufficiently large to cause the accumulation of oil in diked areas should be promptly corrected.

Visible oil leaks are reported to the maintenance department through a work order system, so that they can be fixed immediately. The maintenance department informs the plant operator when the repair has been completed or if additional time is needed to obtain parts and remedy the leak. Measures will be taken to minimize and mitigate the leak, while awaiting repair. Any spilled oil is cleaned up immediately by the operations personnel. Oil spill cleanup supplies are located in a cabinet in the drum storage warehouse.

(xi) Appropriate position of mobile or portable oil storage tanks:

112.7(e) (2) Bulk storage tanks (onshore); (excluding production facilities). (xi) Mobile or portable oil storage tanks (onshore) should be positioned or located so as to prevent spilled oil from reaching navigable waters. A secondary means of containment, such as dikes or catchment basins, should be furnished for the largest single compartment or tank. These facilities should be located where they will not be subject to periodic flooding or washout.

A 500 gallon portable tank and approximately 250 drums are located inside of a covered warehouse. The portable 500 gallon tank is stored within the warehouse in a bermed area which can contain the entire 500 gallons. The north and west sides of the warehouse are designed with grated trenches, which run the length of the entrances, to control spills from leaving the warehouse. These trenches are large enough to contain the contents of any container stored in the warehouse.

C. Facility Transfer Operations [112.7(e)(3)(i-v)]:

(i) Buried piping installation protection and examination:

112.7(e) (3) Facility transfer operations, pumping, and in plant process (onshore); (excluding production facilities). (i) Buried piping installations should have a protective wrapping and coating and should be cathodically protected if soil conditions warrant. If a section of buried line is exposed for any reason, it should be carefully examined for deterioration. If corrosion damage is found, additional examination and corrective action should be taken as indicated by the magnitude of the damage.

Underground piping associated with the buried tanks is double walled with leak detection. Underground pipelines that run between Area B and the fuel island, and from the loading/unloading area sumps to the slop tank are wrapped and cathodically protected. The cathodic protection system on piping is checked monthly. If problems with buried piping are identified, piping is pressure tested, day lighted and repaired, if necessary.

(ii) Not-in-service and standby service terminal connections:

112.7(e) (3) Facility transfer operations, pumping, and in plant process (onshore); (excluding production facilities). (ii) When a pipeline is not in service, or in standby service for an extended time the terminal connection at the transfer point should be capped or blank-flanged, and marked as to origin.

Terminal connections in the tank truck loading/unloading area are capped when not in use. Pipelines that are out of service are evacuated and blank flanged. All aboveground piping is marked with product content, origin, and direction of flow.

(iii) Pipe supports design:

112.7(e) (3) Facility transfer operations, pumping, and in plant process (onshore); (excluding production facilities). (iii) Pipe supports should be properly designed to minimize abrasion and corrosion and allow for expansion and contraction.

Pipe supports are constructed of steel, with concrete foundations. The steel serves as a platform for the piping and has loops to prevent excess movement. Each steel platform has a rubber pad in order to minimize abrasion and corrosion and allow for expansion and contraction of the piping.

(iv) Aboveground valve and pipeline examination:

112.7(e) (3) Facility transfer operations, pumping, and in plant process (onshore); (excluding production facilities). (iv) All aboveground valves and pipelines should be subjected to regular examinations by operating personnel at which time the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces should be assessed. In addition, periodic pressure testing may be warranted for piping in areas where facility drainage is such that a failure might lead to a spill event.

With the exception of the buried piping described in section C (i), all piping at Neverspill is aboveground. Valves, pipelines and pipe supports are observed at the beginning of each shift and throughout the day by operations personnel. Aboveground pipelines and valves are also examined during the weekly inspection discussed in Section E. These inspections are documented (see Appendix 4). In addition, pressure testing is conducted on all aboveground pipelines on the facility once every two years, or more frequently, if conditions warrant.

(v) Aboveground piping protection from vehicular traffic:

112.7(e) (3) Facility transfer operations, pumping, and in plant process (onshore); (excluding production facilities). (v) Vehicular traffic granted entry into the facility should be warned verbally or by appropriate signs to be sure that the vehicle, because of its size, will not endanger aboveground piping.

Note: Identify how aboveground piping is protected from vehicular traffic (e.g., bumper poles or other barriers, clearance signs).

Some aboveground piping is located within the secondary containment areas and is protected against impact from vehicular traffic by concrete berms. Other aboveground piping is protected by barrier poles. Each area that contains aboveground piping also has signs to warn vehicles about piping.

D. Facility Tank Car and Truck Loading/Unloading Operations [112.7(e)(4)(i-iv)]:

(i) Loading/unloading procedures meet DOT regulations:

112.7(e) (4) Facility tank car and tank truck loading/unloading rack (onshore).

(i) Tank car and tank truck loading/unloading procedures should meet the minimum requirements and regulations established by the Department of Transportation. Note: Describe how your facility meets the minimum requirements of U.S. Department of Transportation regulations for loading and unloading (49 CFR 173.31(b), 174.67, and 174.3000 for railcars and 49 CFR 177.834 and 177.837 for tank trucks).

Neverspill Oil Corporation requires all drivers to comply with DOT regulations in 49 CFR part 177 and facility standard operating procedures. All drivers must be authorized and certified by Neverspill Oil Corporation to load or unload product. Truck loading and unloading procedures are posted at the loading and unloading rack and dock area. In addition, the loading/unloading areas are equipped with key card and scully-groundhog type systems.

(ii) Secondary containment for vehicles adequate:

112.7(e) (4) Facility tank car and tank truck loading/unloading rack (onshore). (ii) Where rack area drainage does not flow into a catchment basin or treatment facility designed to handle spills, a quick drainage system should be used for tank truck loading and unloading areas. The containment system should be designed to hold at least maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded in the plant.

Note: Describe the design and capacity of secondary containment for truck loading/unloading areas including transfer operations related to both aboveground tanks and underground tanks.

The tank truck loading/unloading area is designed with perimeter curbing and trenches which empty to a catchment basin. This system is capable of holding the maximum capacity of any single compartment of any truck which loads or unloads at the plant (3,000 gallons).

The fuel island is designed with curbing and sloping topography to two drains which empty to a catchment basin. The secondary containment of this area is large enough to hold the maximum capacity of truck tank fueled at this island (2,000 gallons).
The truck unloading dock area is designed with curbing and a catchment basin for secondary containment. In this area, 55-gallon drums are filled with product from bobtail trucks. The containment in this area is large enough to hold a single compartment (1,000 gallons) of a bobtail truck loaded or unloaded at the facility. Bobtails that are parked at the facility behind the warehouse never contain product.

(iii) Warning or barrier system for vehicles:

112.7(e) (4) Facility tank car and tank truck loading/unloading rack (onshore). (iii) An interlocked warning light or physical barrier system, or warning signs, should be provided in loading/unloading areas to prevent vehicular departure before complete disconnect of flexible or fixed transfer lines.

Warning signs are posted in all the loading/unloading areas, including the fuel island, to prevent vehicular departure before disconnecting flexible or fixed transfer lines. A trained Neverspill employee is present to observe all loading/unloading and fueling operations.

(iv) Vehicles examined for lowermost drainage outlets before leaving:

112.7(e) (4) Facility tank car and tank truck loading/unloading rack (onshore). (iv) Prior to filling and departure of any tank car or tank truck, the lowermost drain and all outlets of such vehicles should be closely examined for leakage, and, if necessary, tightened, adjusted, or replaced to prevent liquid leakage while in transit.

Warning signs are posted in the loading/unloading areas, including the fuel island, to remind drivers to examine drain outlets prior to departure. A trained Neverspill employee is present to observe all loading/unloading and fueling operations.

E. Inspections/Record Keeping [112.7(e)(8)]:

112.7(e) (8) Inspections and records. Inspections required by this part should be in accordance with written procedures developed for the facility by the owner or operator. These written procedures and a record of the inspections, signed by the appropriate supervisor or inspector, should be made part of the SPCC Plan and maintained for a period of three years.

Note: Written inspection procedures (e.g., checklist) should be included in the SPCC Plan. Documentation of the inspections can be maintained in a separate location other than the SPCC Plan as long as their location is referenced as a part of the SPCC Plan for three years. All other records pertaining to SPCC (e.g., drainage discharges, tank integrity testing, training records, etc.) must also be maintained for three years.

Facility inspection procedures: Formal facility inspections are conducted weekly and records of these inspections are documented and signed by the inspector or plant manager. During the weekly inspections, all tanks, containment structures, valves, pipelines, and other equipment are inspected. Every four weeks, high-level alarms and other spill-prevention devices are inspected during the weekly inspection. The checklist used for these inspections can be found in Appendix 4.

Length of time records kept:

Inspection, training, and tank integrity testing records are retained for at least three years.

F. Site Security [112.7(e)(9)(i-v)]:

(i) Fencing:

112.7(e) (9) Security (i) All plants handling, processing, and storing oil should be fully fenced, and entrance gates should be locked and/or guarded when the plant is not in production or is unattended.

The entire facility is enclosed by razor wire fencing and secured gates. Gates are locked from 7pm to 5am, when the facility is unattended.

(ii) Flow valves locked:

112.7(e) (9) Security (ii) The master flow and drain valves and any other valves that will permit direct outward flow of the tank's content to the surface should be securely locked in the closed position when in nonoperating or nonstandby status.

All tank valves are closed and locked at 7 p.m. every day.

(iii) Starter controls locked:

112.7(e) (9) Security (iii) The starter control on all oil pumps should be locked in the 'off' position or located at a site accessible only to authorized personnel when the pumps are in a nonoperating or nonstandby status.

Starter controls are located within a secure area of the facility office with visual contact to loading/unloading areas. Controls are locked in the "off" position when not in use.

(iv) Pipeline loading/unloading connections securely capped:

112.7(e) (9) Security (iv) The loading/unloading connections of oil pipelines should be securely capped or blank-flanged when not in service or standby service for an extended time. This security practice should also apply to pipelines that are emptied of liquid content either by draining or by inert gas pressure.

Pipe line connections are securely capped when they are not in use and blank-flanged when they are in standby service for an extended time. All out of service pipelines are evacuated of their contents.

(v) Lighting adequate to detect spills:

112.7(e) (9) Security (v) Facility lighting should be commensurate with the type and location of the facility. Consideration should be given to:

(A) Discovery of spills occurring during hours of darkness, both by operating personnel, if present, and by nonoperating personnel (the general public, local police, etc.) and
(B) prevention of spills occurring through acts of vandalism.

Lights illuminate the AST areas, the fuel island, the truck loading/unloading area and the warehouse. Lighting is adequate to detect spills during nighttime hours and prevent vandalism.

G. Personnel Training and Spill Prevention Procedures [112.7(e)(10)(i-iii)]:

(i) Personnel instructions:

112.7(e) (10) Personnel, training and spill prevention procedures. (i) Owners or operators are responsible for properly instructing their personnel in the operation and maintenance of equipment to prevent the discharges of oil and applicable pollution control laws, rules and regulations.

Note: Describe spill prevention and operation's training for new hires and refresher training for all personnel.

All new hires are required to have an 8-hour spill prevention training which includes a complete review of Neverspill Oil Corporation's SPCC Plan. Employees are also instructed and tested on the job. Once a year, refresher training and deployment exercises for spill response are conducted.

(ii) Designated person accountable for spill prevention:

112.7(e) (10) Personnel, training and spill prevention procedures.(ii) Each applicable facility should have a designated person who is accountable for oil spill prevention and who reports to line management.

Ms. Kelly Neverspill is the designated person accountable for spill prevention at Neverspill Oil Corporation.

(iii) Spill prevention briefings:

112.7(e) (10) Personnel, training and spill prevention procedures. (iii) Owners or operators should schedule and conduct spill prevention briefings for their operating personnel at intervals frequent enough to assure adequate understanding of the SPCC Plan for that facility. Such briefings should highlight and describe known spill events or failures, malfunctioning components, and recently developed precautionary measures.

During monthly safety briefings, spill prevention is discussed. Any near misses or incidents are discussed in these briefings in order to prevent them from recurring. Employee feedback and recommendations are encouraged in spill prevention and operation. Sign-in sheets, which include the topics of discussion at each meeting, are maintained for documentation.

H. Spill Control Equipment:

List all spill control equipment stored at your facility (e.g., granular absorbent, empty drums, shovels, brooms, absorbent pads and booms, vacuum truck) for the purposes of meeting the requirements of 112.7(c).

Spill control equipment on site includes absorbent pads and booms, granular absorbent, empty drums, brooms, and shovels. Spill equipment is stored inside a cabinet in the warehouse.

I. Emergency Contacts

Part 110-Discharge of Oil: 110.10 Notice. Any person in charge of a vessel or of an onshore or offshore facility shall, as soon as he or she has knowledge of any discharge of oil from such vessel or facility in violation of §110.6, immediately notify the National Response Center (NRC) (800-424-8802; in the Washington, DC metropolitan area, 426-2675). If direct reporting to the NRC is not practicable, reports may be made to the Coast Guard or EPA predesignated On-Scene Coordinator (OSC) for the geographic area where the discharge occurs. All such reports shall be promptly relayed to the NRC. If it is not possible to notify the NRC or the predesignated OCS immediately, reports may be made immediately to the nearest Coast Guard unit, provided that the person in charge of the vessel or onshore or offshore facility notifies the NRC as soon as possible. The reports shall be made in accordance with such procedures as the Secretary of Transportation may prescribe. The procedures for such notice are set forth in U.S. Coast Guard regulations, 33 CFR part 153, subpart B and in the National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR part 300, subpart E. (Approved by the Office of Management and Budget under the control number 2050-0046).

Note: In this section include emergency telephone numbers for spill notification (e.g., Federal National Response Center, key facility personnel, and cleanup contractors.)

National Response Center:	1-800-424-8802
State Notification Number	1-800-555-5555
Local Notification Number	(555) 123-1234
Kelly Neverspill, Facility Manager	(555) 123-4566 Pager (555) 111-1111
John Leaknone, Plant Operator	(555) 123-4567 Pager (555) 222-2222
Joe Sopitup, Cleanup Contractor, Inc.	(555) 765-4321 Pager (555) 333-3333

APPENDIX 1

SECONDARY CONTAINMENT CALCULATIONS FOR DIKED STORAGE AREAS

CONTAINMENT CALCULATION AREA A

Dike Specifications:
Length = 12 ft.
Width = 42 ft.
Height of wall = 1.8 ft.

Tank Diameters:
Tank 1 = 5 ft.
Tank 2 = 5 ft.

Sufficient Freeboard:
100 yr, 24-hr storm event = 6 in. = .5 ft.

Base Area of Tank = $\Pi(d/2)^2$
Area Tank 1 = $\Pi(5/2)^2$
Area Tank 2 = $\Pi(5/2)^2$

Required Dike Volume:
Volume of largest tank

Volume Tank = 4,000 gallons
= 4,000 gal x (.1337 cu. ft./gal)
= 535 cu. ft.

1) Total Dike Area
Length x Width = 12 ft. X 42 ft. = 504 sq. ft.

2) Displacement Area due to tanks
Tank 1 (largest tank) is not used for displacement calculations
Therefore Displacement Area =
Area Tank 2
= 20 sq. ft.

3) Available Dike Area = (Total Dike Area) - (Displacement of Tanks)
= 504 sq. ft. - 20 sq. ft.
= 484 sq. ft.

4) Available Dike Height = (Height of Wall) - (Rainfall Freeboard)
= 1.8 ft. - .5 ft.
= 1.3 ft.

5) Available Dike Volume = (Available Dike Area) x (Available Dike Height)
= 484 sq. ft. X 1.3 sq. ft.
= 629 cu. ft.

6) Available Dike Volume of 629 cu. ft. (4,706 gallons) is greater than the required containment volume of 535 cu. ft. (4,000 gallons).

CONTAINMENT CALCULATION AREA B

Dike Specifications:
Length = 60 ft.
Width = 70 ft.
Height of wall = 2 ft.

Tank Diameters:
Tank 3 = 16 ft.
Tank 4 = 16 ft.
Tank 5 = 16 ft.
Tank 6 = 14 ft.
Tank 7= 12 ft.
Tank 8 = 10 ft.

Sufficient Freeboard:
100 yr, 24-hr storm event = 6 in. = .5 ft.

Required Dike Volume:
Volume of largest tank

Base Area of Tank = $\Pi(d/2)^2$
Area Tank 6 = $\Pi(14/2)^2$
Area Tank 7 = $\Pi(12/2)^2$
Area Tank 3-5 = $\Pi(16/2)^2$
Area Tank 8 = $\Pi(10/2)^2$

Volume Tank 3 = 25,000 gallons
= 25,000 gal x (.1337 cu. ft./gal)
= <u>3,342.5 cu. ft.</u>

1) Total Dike Area
Length x Width = 60 ft. X 70 ft. = 4,200 sq. ft.

2) Displacement Area due to Tanks
Tank 3 (largest tank) is not used for displacement calculations
Therefore Displacement Area =
Area Tank 4 + Area Tank 5 + Area Tank 6 + Area Tank 7 + Area Tank 8
= 201 sq. ft. + 201 sq. ft. + 154 sq. ft. + 113 sq. ft. + 78 sq. ft.
= <u>747 sq. ft.</u>

3) Available Dike Area = (Total Dike Area) - (Displacement of Tanks)
= 4,200 sq. ft. - 747 sq. ft.
= <u>3,453 sq. ft.</u>

4) Available Dike Height = (Height of wall) - (Rainfall freeboard)
= 2 ft. - .5 ft.
= <u>1.5 ft.</u>

5) Available Dike Volume = (Available Dike Area) x (Available Dike Height)
= 3,453 sq. ft. x 1.5 ft
= 5,179 cu. ft.

6) Available Dike Volume of 5,179 cu. ft. (38,736 gallons) is greater than the required containment volume of 3,342.5 cu. ft. (25,000 gallons).

APPENDIX 2

DRAINAGE DISCHARGE REPORT FORM

APPENDIX 2

DRAINAGE DISCHARGE REPORT FORM
AREA B CONTAINMENT, UNDIKED AREA SUMP AND OIL/WATER SEPARATOR SYSTEM

Operator Name:
Date and Time Oily Water Discharged from Oil/Water Separator: OR Date and Time Valve Opened in Containment Area A or Undiked Area Sump:
Date and Time Discharge of Oil/Water Separator Finished: OR Date and Time Valve Closed in Containment Area A or Undiked Area Sump:
Appearance of Water at Time of Pumping or Discharge:
Signature of Operator

APPENDIX 3

FUEL TANK INSPECTION REPORT

AST INSPECTION REPORT

Date _______________

Location ______________________________ Liquid Level ______________________________

Tank No. ______________________________ Temp. ______________________________

Capacity ______________________________ Diameter __________ Height ____________

1. Weather Stripping or Flashing

   a. Are all pieces tight against shell? ______________________________
   b. Are any pieces missing or (Photo No. ___) require repairs? ___________________
      How many? ______________________________

2. Hoses & Piping

   a. General appearance of hoses ______________________________
   b. Any leaks? _______________ If so, explain ______________________________
   c. Aboveground piping free of leaks? ______________________________

3. Roof Ladder

   a. Does ladder appear to roll easily or need repairs? __________________________

4. Contamination

   a. Is roof free of oil and water? _____________ If not, indicate percent coverage of each liquid and depth at worst location on attached drawing.

5. Corrosion Control

   a. Note general appearance of paint on shell, roof, ladder and structural members:
      ____
   b. Is rusting or pitting occurring on any of the above? ______________________
      If yes, explain where and if repairs are needed immediately. _________________
      ____
   c. Are all insulating flange washers and sleeves in place? ____________________
      If missing, cracked, or broken, explain where and repairs needed: _____________
      ____
   d. Are all ground and/or anode straps in place? ______________________________
      If missing or damaged, indicate location on drawing and explain repairs needed:
      ____

6. Are high-level alarms functioning properly? _______ Tested to verify? ________________

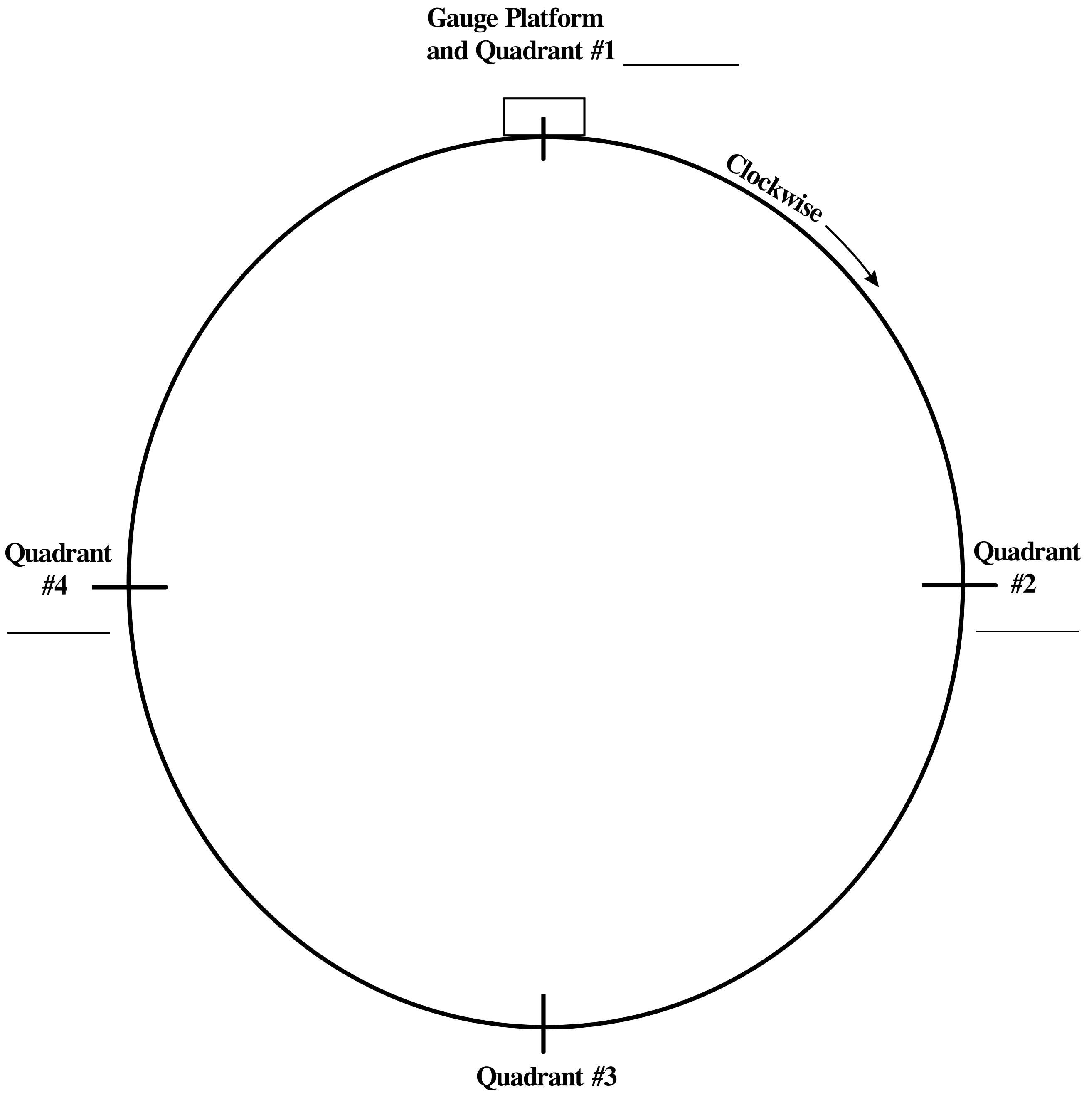
7. Other Observations

   a. Note anything that might affect smooth movement of roof and any problem that would allow escape of vapors or air pollution: ______________________________
      ____
      ____

8. Show any damaged areas or problem areas (on tanks with floating roof, show location and size of any gaps in seal) on attached drawing.

9. Remote and side gauges working ______________________________
   ____

Fuel Tank Inspection Report



Report prepared and appropriate
work orders submitted by:

____

APPENDIX 4

WEEKLY FACILITY INSPECTION REPORT AND CHECKLIST

WEEKLY FACILITY INSPECTION CHECKLIST

Date: ______________________ Time: ______________________ Inspector: ______________________	X=Satisfactory NA=Not Applicable 0=Repair or Adjustment Required C=See comment under Remarks/Recommendations

Drainage	**ASTs**
____ Any noticeable oil sheen on runoff.	____ Tank surfaces checked for signs of leakage.
____ Containment area drainage valves are closed and locked.	____ Tank condition good (no rusting, corrosion, pitting).
____ Oil/water separator systems working properly.	____ Bolts, rivets, or seams are not damaged.
____ Effluent from oil/water separator inspected.	____ Tank foundation intact.
____ No visible oil sheen in containment area.	____ Level gauges and alarms working properly.
____ No standing water in containment area.	____ Vents are not obstructed.
	____ Valves, flanges, and gaskets are free from leaks.
	____ Containment walls are intact.
Pipelines	**Truck Loading/Unloading Area**
____ No signs of corrosion damage to pipelines or supports.	____ No standing water in rack area.
____ Buried pipelines are not exposed.	____ Warning signs posted.
____ Out-of-service pipes capped.	____ No leaks in hoses.
____ Signs/barriers to protect pipelines from vehicles are in place.	____ Drip pans not overflowing.
____ No leaks at valves, flanged, or other fittings.	____ Catch basins free of contamination.
	____ Containment curbing or trenches intact.
	____ Connections are capped or blank-flanged.
Security	**Training**
____ Fence and gates intact.	____ Spill prevention briefing held.
____ Gates have locks.	____ Training records are in order.
____ ASTs locked when not in use.	
____ Starter controls for pumps locked when not in use.	
____ Lighting is working properly.	

Remarks/Recommendations: ____

____

____

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST
APPENDIX 5

Section 112.20(e) of the facility response plan regulation requires that all facilities regulated by the Oil Pollution Prevention Regulation (40 CFR part 112) conduct an initial screening to determine whether they are required to develop a facility response plan. The criteria in this checklist can be found in 40 CFR 112.20(f)(1). Facilities should include this form with their SPCC Plan.

CERTIFICATION OF THE APPLICABILITY
OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST

FACILITY NAME: Neverspill Oil Corporation, Clean City Bulk Storage Terminal

FACILITY ADDRESS: 2000 Prevention Street

Clean City, CA 90000

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
Yes ___ No _X_

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?
Yes ___ No _X_

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula[1]) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.
Yes ___ No _X_

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]?
Yes ___ No _X_

---

[1]If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2]For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
Yes ___ No _X_

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Kelly Neverspill	*Kelly Neverspill*
Name (please type or print)	Signature
Facility Manager	08/01/94
Title	Date

from 40 CFR 112 Appendix C, Attachment C-II

APPENDIX 6

SPCC PLAN CHECKLIST FOR BULK OIL STORAGE FACILITIES

SPCC PLAN CHECKLIST FOR BULK OIL STORAGE FACILITIES

I. **Operator and Owner Addresses and Phone Nos.**

II. **Day-to-day Operations and Facility Background**

III. **Receiving Water/Probable Flow Paths** (e.g., facility storm drain, street storm drain, WWTP outfall, overland to river or stream, flood control pond)

IV. **Copy of SPCC Plan/Site Diagrams**

__ Certification of engineer: 112.3 (d).
__ Reviewed within past three years: 112.5(b).
__ Full approval of appropriate level management: 112.7.
__ Spill history: 112.7(a)
__ Spill predictions: 112.7(b)
__ Diversionary structures and conainment: 112.7(c)

V. **SPCC Measures**

112.7(e)(1) Facility drainage:

____i) Dike drainage via valves or manually controlled pumps.
____ii) No flapper-type drain valves on diked areas. Dike drain valves manual control.
____iii) Undiked area drains to catch basin.
____iv) If no drain prep as above. Diversion system to return oil.
____v) If drainage water not moved by gravity flow, then redundant lift pump setup.

112.7(e)(2) Bulk storage tanks:

____i) Material and construction compatible with contents.
____ii) Secondary containment for largest tank + precipitation, and
____ dikes sufficiently impervious to spilled oil.
____ or trench enclosure draining to catch basin.
iii) Rainwater drainage (into a storm drain or water course) bypassing in plant treatment okay if:
____ bypass valve normally sealed closed, and
____ inspection and compliance with water quality standards, and
____ valve opened under responsible supervision, and
____ records kept of drainage events.
____iv) Buried tanks protected against corrosion/regular pressure testing.
____v) Partially buried tanks protected against corrosion.
____vi) Surface tanks integrity tested via hydrostatic, visual inspection, or nondestructive shell thickness methods. Construction of tanks base adequate.
____vii) Internal heating coils are closed loop or treated and monitored.
____viii) Fail-safe engineering on all tanks, new and old, via high liquid level alarms or high liquid level pump cutoff devices, or audible/code warning, and
____ regular testing of liquid level sensors.
____ix) Water discharge facilities inspected regularly (NPDES).
____x) Visible leaks on tanks and piping corrected (Protocol).

____xi) Secondary containment for largest portable storage tank.
____ Portable tank area free from periodic flooding or washout.

112.7(e)(3) Facility transfer operations:

____i) Buried piping protected against corrosion.
____ii) Out-of-service pipes capped with origin marked.
____iii) Pipe supports minimize abrasion, corrosion, sagging.
____iv) Regular inspection of surface pipe and valves.
____ Regular pressure testing for pipes with no secondary containment.
____v) Signs to warn vehicles about piping.

112.7(e)(4) Facility loading/unloading rack:

____i) Follow DOT procedures for loading/unloading tank cars and tank trucks.
____ii) Secondary containment for largest vehicle compartment (or quick drainage system).
____iii) Prevention of early vehicle departure via warning signs, physical barriers, or interlocked warning light.
____iv) Vehicles examined for leakage at all outlets prior to departure.

112.7(e)(8) Inspections and records:

____ Written procedures records kept for three years of inspections and,
____ Records (inspections, discharges, training, briefings) kept for three years.

112.7(e)(9) Security:

____(i) Fully fenced.
____ Gates locked when plant unattended.
____(ii) Master flow and drain valves of tanks locked closed.
____(iii) Starter control locked "off" or located where only the authorized have access.
____(iv) Out-of-service pipelines capped or blank-flanged.
____(v) Lighting adequate for night spill detection and deterring vandals.

112.7(e)(10) Personnel, training and spill prevention procedures:

____(i) Personnel instructed in equipment operation and oil regulations.
____(ii) One person accountable for spill prevention.
____(iii) Owner/operator schedules regular briefings.

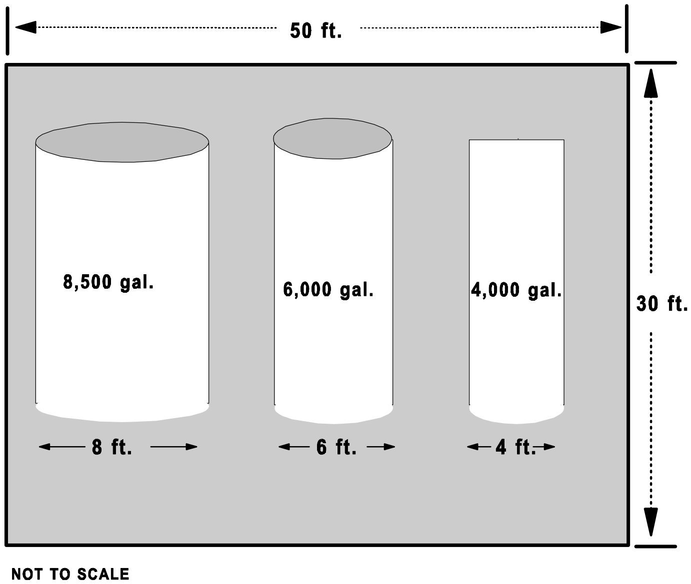
____ 112.20(e) Applicability of Substantial Harm Criteria Checklist Completed.

APPENDIX 7

SAMPLE CONTAINMENT VOLUME CALCULATIONS

The following provides a visual example for calculating secondary containment volumes for different storage scenarios. The examples are fictional.

SAMPLE CONTAINMENT VOLUME CALCULATIONS



1. EXAMPLE OF DESIGN:
VERTICAL TANKS ONLY

REQUIRED CONTAINMENT VOLUME:

Entire contents of largest tank (8500 gallons) plus sufficient freeboard for precipitation (100 yr, 24-hour storm event)

ASSUMPTIONS:

Dike length = 50 ft.
Dike width = 30 ft.
Sufficient freeboard = 6 in. = .5 ft.

1. Volume of Largest Tank (cu. ft.)
= Tank Volume x 0.1337 cu. ft./gal. conversion factor
= 8500 gals. x 0.1337 cu. ft./gal. = 1136 cu. ft.

2. Total Diked Area = 30 ft. x 50 ft. = 1500 sq. ft.

3. Base Area of Vertical Tanks (within the containment)
= 3.14 x (½ diameter of all but the largest tank)^2
= 3.14 x [(½ x 6)^2 + (½ x 4)^2]
= 3.14 x 13 sq. ft. = 41 sq. ft.

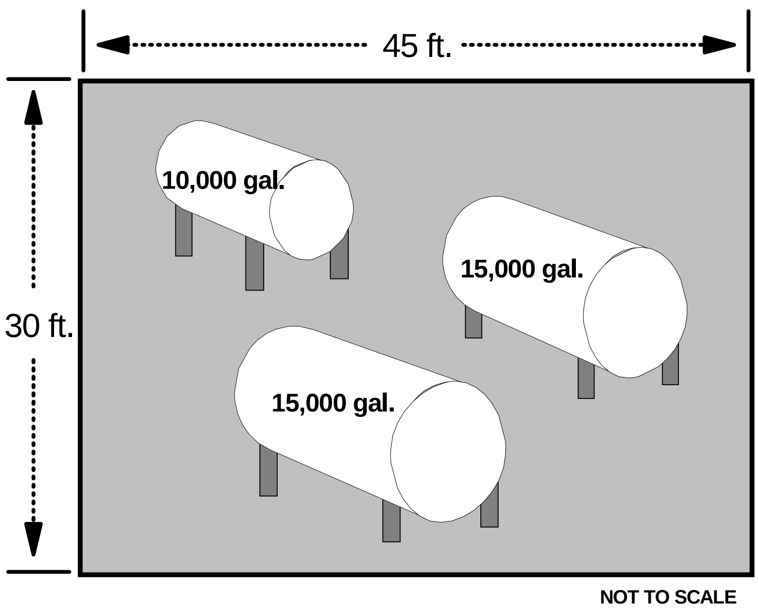
4. Available Diked Area = (Total Diked Area) - (Base Area of Tanks)
= (1500 sq. ft.) - (41 sq. ft.) = 1459 sq. ft.

5. Height to Contain Tank Volume = (Volume of Largest Tank) ÷ (Available Diked Area)
= (1136 cu. ft.) ÷ (1459 sq. ft.)
= .78 ft.

6. Required Height of Dike Walls = (Height to Contain Tank Volume) + (Sufficient Freeboard)
= .78 ft. + .5 ft.
= 1.28 ft. or 15.3 in.

In this example, the containment wall must be at least 15.3 inches in height to provide the required containment capacity for this tank area.

NOTE: In the following two examples, the assumption is made that the horizontally mounted tanks do not significantly impinge on available containment volume, because they are typically elevated on supports. If the support system is fairly massive, the amount of volume it displaces should be taken into account.



2. EXAMPLE OF DESIGN: HORIZONTAL TANKS ONLY

REQUIRED CONTAINMENT VOLUME:

Entire contents of largest tank (15,000 gallons) plus sufficient freeboard for precipitation (100 yr, 24-hr storm event)

ASSUMPTIONS:

Dike length = 45 ft.
Dike width = 30 ft.
Sufficient freeboard = 6 in. = .5 ft.

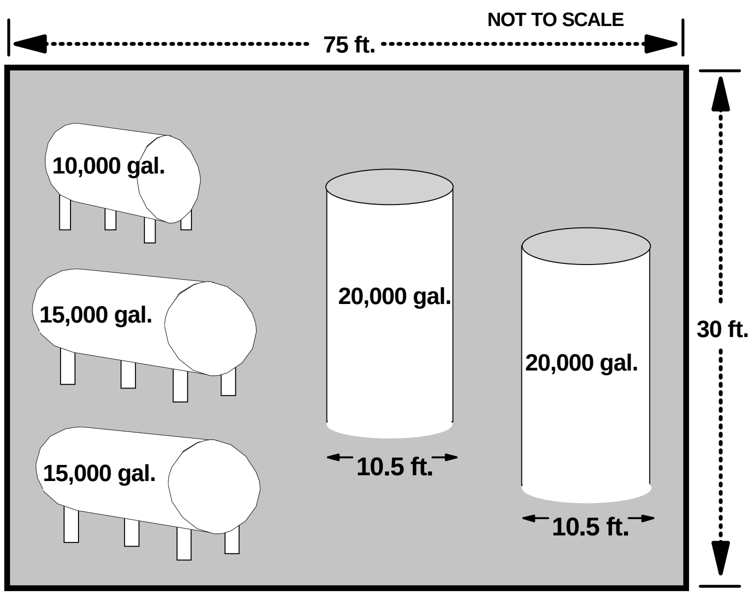
1. Volume of Largest Tank (cu. ft.)
 = Tank Volume x 0.1337 cu. ft./gal. conversion factor
 = 15,000 gals. x 0.1337 cu. ft./gal. = <u>2005.5 cu. ft.</u>

2. Available Diked Area = 30 ft. x 45 ft. = <u>1350 sq. ft.</u>

3. Height to Contain Tank Volume = (Tank Volume) ÷ (Available Diked Area)
 = 2005.5 cu. ft. ÷ 1350 sq. ft.
 = <u>1.49 ft.</u>

4. Required Height of Dike Walls = (Height to Contain Tank Volume) + (Sufficient Freeboard)
 = 1.49 ft. + .5 ft.
 = <u>2 ft.</u> = <u>24 in.</u>

In this example, the containment wall must be at least 24 inches in height to provide the required containment capacity for this tank area.



3. EXAMPLE OF DESIGN: HORIZONTAL AND VERTICAL TANKS

REQUIRED CONTAINMENT VOLUME:

Entire contents of largest tank (20,000 gallons) plus sufficient freeboard allowance for precipitation (100 yr, 24-hr storm event).

ASSUMPTIONS:

Dike length = 75 ft.
Dike width = 30 ft.
Sufficient freeboard = 6 in. = .5 ft.

1. Volume of Largest Tank (cu. ft.)
   = Tank Volume x 0.1337 cu. ft./gal. conversion factor
   = 20,000 gals. x 0.1337 cu. ft./gal. = <u>2674 cu. ft.</u>

2. Total Diked Area = 30 ft. x 75 ft. = <u>2250 sq. ft.</u>

3. Base Area of Vertical Tanks (within the containment)
   = 3.14 x (½ diameter of all but the largest tank)^2
   = 3.14 x (½ x 10.5 ft.)^2
   = <u>86.5 sq. ft.</u>

4. Available Diked Area = (Total Diked Area) - (Base Area of Tanks)
   = (2250 sq. ft.) - (86.5 sq. ft.) = <u>2163.5 sq. ft.</u>

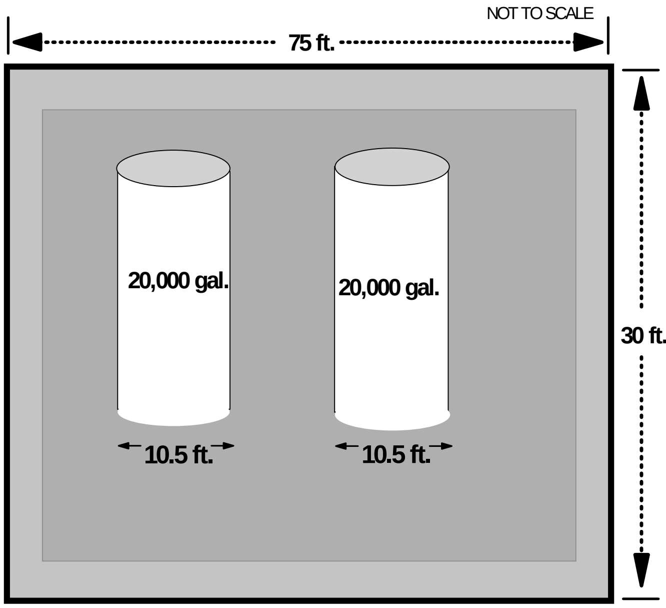
5. Height to Contain Tank Volume = (Volume of Largest Tank) ÷ (Available Diked Area)
   = (2674 sq. ft.) ÷ (2163.5 sq. ft.)
   = <u>1.24 ft.</u>

6. Required Height of Dike Walls = (Height to Contain Tank Volume) + (Sufficient Freeboard)
   = 1.24 ft. + .5 ft.
   = <u>1.74 ft.</u> or <u>21 inches</u>, approximately.

In this example, the containment wall must be at least 21 inches in height to provide the required containment capacity for this tank area.

4. EXAMPLE OF DESIGN: VERTICAL TANKS - IRREGULAR CONTAINMENT

The following is an example to determine whether an existing containment is sufficient. The tanks in this example are located on a raised slab within the containment area.



REQUIRED CONTAINMENT VOLUME:

Entire contents of largest tank (20,000 gallons) plus sufficient freeboard for precipitation (100 yr, 24-hr storm event).

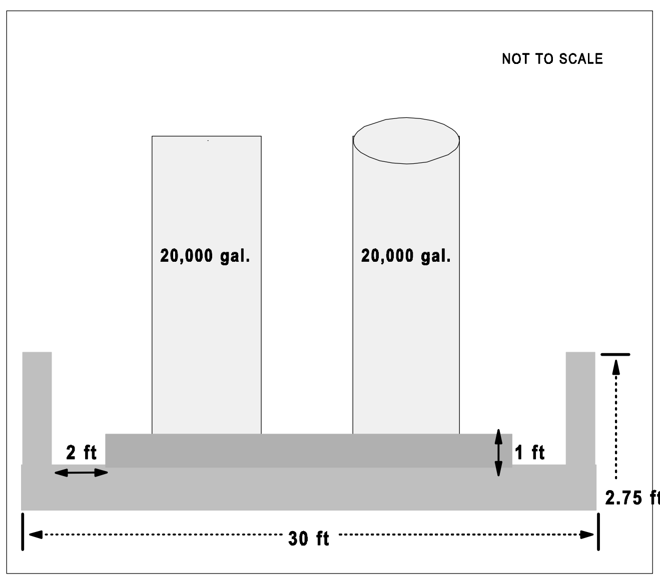
ASSUMPTIONS:
Containment -
Length = 75 ft
Width = 30 ft
Height = 2.75 ft

Raised slab -
Length = 71 ft
Width = 26 ft
Height = 1 ft

Sufficient Freeboard = 6 in. = .5 ft.

AVAILABLE CONTAINMENT:

(containment length x width x height) minus (raised slab length x width x height)



1. Volume of Largest Tank (cu. ft.)
   = Tank Volume x 0.1337 cu. ft./gal. conversion factor
   = 20,000 gals. x 0.1337 cu. ft./gal. = <u>2,674 cu. ft.</u>

2. Available Dike Height = (Dike Height) - (Sufficient Freeboard)
   = 2.75 ft. - .5 ft.
   = <u>2.25 ft.</u>

EXAMPLE OF DESIGN: VERTICAL TANKS - IRREGULAR CONTAINMENT (continued)

3. In this case the raised 1 foot high slab also decreases the amount of total diked area significantly and should be considered.

   Total Volume of Diked Area = (30 ft. x 75 ft. x 2.25 ft.) - (26 ft. x 71 ft. x 1 ft) = <u>3,216.5 cu. ft.</u>

4. Displacement Volume of Tanks within Containment
   = 3.14 x (½ diameter of all but the largest tank)^2
   x height of tank within the containment
   = 3.14 x (½ x 10.5 ft.)^2 x 1.25 ft.
   = <u>108 cu. ft.</u>

5. Available Volume of Diked Area

   = (Volume of Diked Area) - (Displacement Volume of Tanks Within Containment)
   = (3,216.5 cu. ft.) - (108 cu. ft.)
   = <u>3,108 cu. ft.</u>

Therefore:

Available volume of the diked area is sufficient to contain the volume of the largest tank plus sufficient freeboard allowance

Volume of Largest Tank = 2,674 cu. ft.
Available Volume of Diked Area = 3,108 cu. ft.